

XXXI.—Review of the Species of the Family Coliidae.

By Captain G. E. SHELLEY, F.Z.S.

THE Coliidae form a very distinct family, not closely allied to any other, but may, I think, with advantage be retained next to the Musophagidae until some more suitable position be definitely fixed for them. Their anatomy is principally known to me by the following papers:—Murie, Ibis, 1872, pp. 262–280; Garrod, P. Z. S. 1876, pp. 416–419; Forbes, Ibis, 1881, p. 24. This family, which is confined to Africa, consists of eight species, including four or five more or less well-marked races. They are all referable to the one genus *Colius*, Briss. Orn. iii. 1760, p. 204, type *C. capensis*. The minor divisions proposed by Bonaparte—*Rhabdocolius* for *C. striatus* and its allies, and *Urocolius* for *C. erythromelon*—present no definite characters.

The Colies are all fruit-eaters, live in small bands, frequent thick bushes, and, when disturbed, fly straight to some neighbouring covert. Owing to their peculiar structure, they place themselves in the most extraordinary attitudes when they rest or scramble amongst the boughs, and they roost at night in tightly packed companies for warmth, generally, if not always, with their feet above their heads. Their nests are cup-shaped and placed in thickish bushes at a few feet from the ground, and some if not all, of the species, frequently add green leaves to the interior of their nests during incubation. The eggs are rough, rather obtuse ovals, and generally white.

In life the dark portions of the bill are blue-grey, but become black in the dried skins, and the legs, which are red in life, fade to buff. The bare skin round the eye and the pale portions of the bill in *C. macrourus* and *C. erythromelon* are bright red in living specimens, while in all the other species, I believe, the bare skin is slaty black and the pale portion of the bill buff or buffish horn-colour.

There are now examples of three species of this genus living in the Zoological Society's Gardens. They are admirably adapted for cage-birds, being active, bold, and apparently hardy, and the quaintness of their attitudes is interesting to watch.

Key to the Species.

- a.* A sharply defined basal half of the upper mandible red, and the bare skin round the eyes of the same colour (fading in dried skins into buff); remainder of the bill black, with the exception, occasionally, of the basal portion of the lower mandible. Tail-feathers distinctly narrower. Upper parts more or less shaded with green. No trace of bars on any portion of the plumage.
- a*¹. Nape pale blue, strongly contrasting with the crest and mantle. 1. *C. macrourus*.
- b*¹. Nape uniform with the crest and mantle . . . 2. *C. erythromelon*.
- b.* No portion of the lower mandible black. Upper mandible black, generally with a pale portion, but never with a sharply defined pale basal half. Tail-feathers distinctly broader. With no green shade on any portion of the plumage.
- b*¹. With some bright chestnut on the rump.
- b*². Middle and lower back black, with a broad white band down the centre 3. *C. capensis*.
- c*². Middle and lower back bright chestnut. . . . 4. *C. castanonotus*.
- c*¹. Entire back dull brown, nearly uniform with the wings and tail. Throat with distinct bars.
- c*². Cheeks and ear-coverts brown like the crown.
- c*³. Forehead jet-black. A larger amount of black on the throat. Upper mandible with a pale patch 5. *C. nigricollis*.
- d*³. Forehead never jet-black. A less amount of black on the throat. Upper mandible blackish with no pale patch . . . 6. *C. striatus*.
- d*². Cheeks and ear-coverts white or nearly so. With a pale patch on the upper mandible.
- d*³. Crown brown 7. *C. leucotis*.
- e*³. Crown white. 8. *C. leucocephalus*.

1. *COLIUS MACROURUS*.

Lanius macrourus, Linn. S. N. i. 1766, p. 134.

Colius senegalensis, Gm. S. N. i. 1788, p. 842; Hartl. Orn. W.-Afr. 1857, p. 155; Fischer, Zeitschr. ges. Orn. (Madaraz), 1844, p. 363 (Pangani).

Colius macrourus, Gray & Mitchell, Gen. B. ii. 1849,

p. 393, pl. 96 (good) ; Heugl. Orn. N.O.-Afr. 1869-71, pp. 712, cliv ; Finsch, Tr. Z. S. vii. 1869, p. 275 ; Blauf. Geol. & Zool. Abyss. 1870, p. 318 ; Antin. & Salvad. Ann. Mus. Civ. Genova, 1873, p. 416 (Bogos) ; Bocage, Orn. Angola, 1877, p. 130 (Angola, Hartl. ?) ; Rochebrune, Faun. Sénéamb. 1884, p. 127.

Hab. N.E., E., and W. Africa. Between about 15° N. lat. and 5° S. lat. Bogos, Abyssinia, Kordofan, White Nile, Masai-land to Pangani, Gaboon, Sierra Leone, Casamanse, Senegambia.

A small immature specimen in the British Museum, labelled "Lebka R., 2500 ft. (Blanford)," has no blue on the nape, and the entire bill is pale.

2. COLIUS ERYTHROMELON.

? *Loxia cinerea*, Sparrm. Mus. Carls. 1786-88, pl. 88 (not recognizable).

Colius indicus, Lath. Ind. Orn. i. 1790, p. 370 (incorrect locality).

Colius coromandelicus, Licht. sen., Hamb. Nat. Verz. 1793, p. 42 (incorrect locality).

Le Coliou Guiriva, Levaill. Ois. d'Afr. vi. 1808, p. 42, pl. 258 (good).

Colius erythromelon, Vieill. Nouv. Dict. vii. 1817, p. 378 ; Gurney, in Anderss. B. Dam. Ld. 1872, p. 203 ; Sharpe, ed. Layard's B. S. Afr. 1884, pp. 551, 853 ; Sclater, P. Z. S. 1884, p. 473, pl. 45. figs. 2, 3 (good).

Colius senegalensis, Less. (nec Gm.), Traité d'Orn. 1831, p. 453.

Colius quiriva, Rüpp. Mus. Senk. iii. 1845, p. 43 ; Kirk, Ibis, 1864, p. 329 (Zambesi).

Colius erythromelas, Cab. Mus. Hein. iii. 1860, p. 97 ; Finsch & Hartl. Vög. Ostaf. 1870, p. 469 ; Bocage, Orn. Angola, 1877, p. 128 (Benguela).

Colius macrurus, Strickl. & Sclat. Contr. Orn. 1852, p. 151.

Colius capensis, Layard (nec Gm.), B. S. Afr. 1867, p. 222.

Hab. S. Africa, Zambesi, Matabele, Transvaal, Cape Colony, Damara, Benguela.

3. *COLIUS CAPENSIS*.

Loxia colius, Linn. S. N. i. 1766, p. 301.

Colius capensis, Gm. S. N. i. 1788, p. 842 ; Gurney, Ibis, 1868, p. 47 (Natal) ; id. in Anderss. B. Dam. Ld. 1872, p. 202 ; Sharpe, ed. Layard's B. S. Afr. 1884, pp. 552, 853.

Colius erythropus, Gm. S. N. i. 1788, p. 842 ; Ayres, Ibis, 1871, p. 259 (Transvaal).

Colius leuconotus, Lath. Ind. Orn. i. 1790, p. 369.

Le Coliou à dos blanc, Levaill. Ois. d'Afr. vi. 1808, p. 39, pl. 257 (good).

Colius erythropygius, Vieill. Nouv. Diet. vii. 1817, p. 377.

Hab. S. Africa, Transvaal, Natal, Cape Colony, Damara.

I have rejected the oldest title *colius* on account of its having been previously employed by Brisson for the genus.

There are two specimens of this species now living in the Zoological Society's Gardens.

4. *COLIUS CASTANOTUS*.

Colius castanotus, E. & J. Verr. Rev. et Mag. Zool. 1855, p. 351 (Gaboon) ; Hartl. Orn. W.-Afr. 1857, p. 155 ; Monteiro, Ibis, 1862, p. 333 (Angola) ; Selater, P. Z. S. 1876, p. 413, pl. 35 (good) ; Bocage, Orn. Angola, 1877, p. 129 (Benguela) ; Sharpe, ed. Layard's B. S. Afr. 1884, p. 554.

Hab. S. and W. Africa, Benguela, Angola, Gaboon.

In the otherwise good illustration of this bird in the P. Z. S. the upper mandible should not be so uniformly coloured, but should have a large pale blotch extending over the basal half of the culmen.

5. *COLIUS NIGRICOLLIS*.

Le Coliou rayé à gorge noire, Levaill. Ois. d'Afr. vi. 1808, p. 45, pl. 259 (good).

Colius nigricollis, Vieill. Nouv. Diet. vii. 1817, p. 378 ; Hartl. Orn. W.-Afr. 1857, p. 155 (Angola) ; Sharpe, P. Z. S. 1873, p. 717 (Congo) ; Bocage, Orn. Angola, 1877, p. 129 ; Reichenow, J. f. O. 1877, p. 15 (Loango Coast) ; Sel. P. Z. S. 1884, p. 530, pl. 45. fig. 1 (good) ; Rochebrune, Faun. Sénégal. 1884, p. 128 (Casamanse, Gambia).

Hab. Central and W. Africa. Ndoruma in Central Africa,

about 5° N. lat. and 25° E. long. On the West Coast, Angola, Congo, Loango Coast, Casamance, and Gambia.

There is a fine specimen in the British Museum labelled "Ndoruma (*F. Bohudorff*).” There is also a living specimen in the Zoological Society's Gardens.

6. COLIUS STRIATUS.

Tanagra macroura, Scop. (nec Linn.) Del. Flor. et Faun. Insubr. ii. 1786, p. 95.

Colius striatus, Gm. S. N. i. 1788, p. 369; Sharpe, ed. Layard's B. S. Afr. 1884, pp. 558, 853.

Colius panayensis, Gm. S. N. i. 1788, p. 843.

Le Coliou rayé, Levaill. Ois. d'Afr. vi. 1808, p. 36, pl. 256 (fair, Cape Colony).

Colius minor, Cab. J. f. O. 1876, p. 94 (Natal).

Hab. S. Africa, Shiré R., Swaziland, Transvaal, Natal, Cape Colony.

The present species includes three subspecies.

a. With a more or less distinctly marked chestnut forehead.

1. *C. striatus intermedius*, Shelley. Cape Colony.

b. Forehead perfectly uniform with the crown.

b¹. Larger 2. *C. striatus typicus*, Gm. Eastern S. Africa.

c¹. Smaller 3. *C. striatus minor*, Cab. Shiré R. and Natal.

In the British Museum there is a small specimen from the Shiré R. possibly immature; this I believe to belong to the *C. minor*, Cab., of which I have not been able to examine the type. An immature specimen from the Knysna in the British Museum has the entire upper mandible pale and the lower mandible nearly black.

I have proposed the title *C. intermedius* for the Cape Colony subspecies as it is intermediate between typical *C. striatus* and *C. nigricollis*.

7. COLIUS LEUCOTIS.

Colius leucotis, Rüpp. Mus. Senk. iii. 1845, p. 42, pl. 2. fig. 1 (good); Heugl. Orn. N.O.-Afr. 1869-71, pp. 710, cliv; Finsch, Trans. Z. S. vii. 1869, p. 276; Blanf. Geol. & Zool. Abyss. 1870, p. 316; Finsch & Hartl. Vög. Ostaf. 1870, p. 472; Antin. & Salvad. Ann. Mus. Civ. Gen. 1873, p. 416

(Bogos); Sharpe, P. Z. S. 1873, p. 714 (Mombas); Nicholson, P. Z. S. 1878, p. 358 (Dar-es-Salaam); Cab. J. f. O. 1878, p. 237 (Kikamba); Fischer & Reichen. J. f. O. 1878, p. 252 (Takaungu); Salvad. Ann. Mus. Civ. Gen. 1884, p. 100 (Shoa).

? *Colius capensis*, DesMurs (nec Gm.) in Lefebvre's Voy. Abys. 1845, p. 123; Heugl. Orn. N.O.-Afr. 1869-71, pp. 714, cliv (ex DesMurs).

Colius striatus, Sclat. P. Z. S. 1864, pp. 107, 112 (Usaramo); Heugl. Orn. N.O.-Afr. 1869-71, pp. 711, cliv. (part N.E. Afr. ex Sclat.); Finsch & Hartl. Vög. Ostaf. 1870, p. 471 (part E. Afr. ex Sclat.).

Hab. N.E. and E. Africa. Between 15° N. lat. and 8° S. lat. Bogos, Abyssinia, Shoa, White Nile, Masai-land, Zanzibar Province to Dar-es-Salaam.

Colius leucotis, which is the north-eastern representative of *C. striatus*, presents, like that species, two if not three subspecific phases, which may enable the practised eye to recognize the districts from which they come.

a. Larger: wing 3·8 to 4. Tail-feathers generally slightly broader.

Neck and back generally more distinctly barred.

1. *C. leucotis typicus*. N.E. Africa, extending southward to Kitui in Ukamba.

b. Smaller: wing 3·35 to 3·75. Tail-feathers generally slightly narrower. Neck and back generally less distinctly barred.

2. *C. leucotis affinis*. E. Africa; Upper White Nile to Dar-es-Salaam.

The small race *b* shows the strongest variation in two specimens from Dar-es-Salaam; in these the back is entirely without signs of bars, the upper parts are slightly more rufous, and the white on the throat and sides of the head clearer and more strongly contrasted with the surrounding brown of the plumage.

These subspecies appear to run into each other.

8. *COLIUS LEUCOCEPHALUS*.

Colius leucocephalus, Reichen. Orn. Centralbl. 1879, p. 114 (Kikomba); Reichen. & Schalow, J. f. O. 1879, p. 313; Fischer, Zeitschr. ges. Orn. (Madaraz), 1884, p. 362.

Hab. E. Africa, Kikomba in Masai-land.

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This species is, I believe, only known by the single type specimen, which I have not been able to examine. Its measurements agree well with the small race of *C. leucotis*, which I have proposed to distinguish as *C. l. affinis*. Should its characters prove to be due only to a partial albinism, the name *C. leucocephalus*, Reichen., will take the place by priority of my *C. l. affinis*.

XXXII.—Notices of recent Ornithological Publications.

[Continued from p. 234.]

85. *Cory's 'Birds of San Domingo' (completion).*

[The Birds of Haiti and San Domingo. By Charles B. Cory, F.L.S. Part IV. (completing the work). Boston: Estes and Lauriat.]

We congratulate Mr. Cory on the successful accomplishment of his meritorious work. It is a most useful volume, and deserves great commendation. Mr. Cory has not only much increased our knowledge of the peculiar avifauna of San Domingo, but has likewise brought together a *résumé* of previous authorities on the subject, and made his work a complete monograph. We can only regret that he has not given us a little longer essay by way of introduction. Thirty-two species are stated to be peculiar to the San-Domingan avifauna. The following six genera are, we believe, so far as is known, restricted to this island:—*Microligea*, *Dulus*, *Phænicophilus*, *Calyptophilus*, *Loximitris*, and *Temnotrogon*. But there is a second *Dulus* (*D. nuchalis*) known to science, of which the exact habitat has not yet been ascertained.

Mr. Cory has finished San Domingo. But there are many other islands in the Antilles that require similar treatment (ornithologically), and will well reward the researches of Mr. Cory and his collectors.

86. *Dresser's Monograph of the Bee-eaters.*

[A Monograph of the Meropidae, or Family of the Bee-eaters. By H. E. Dresser, F.L.S. Part IV. Small folio. London: 1884.]